

10/552201

JC09 Rec'd PCT/PTO 06 OCT 2005

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| TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371 Express Mailing Label #ED 959684018US | ATTORNEY'S DOCKET NUMBER 14135-1 PCT(US) |
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U.S. APP. No. (If known, see 37 CFR 1.5)

PCT/US 2004/010234

INTERNATIONAL APP. No.

April 2, 2004

INTERNATIONAL FILING DATE

April 7, 2003

PRIORITY DATE CLAIMED

Microfluidic Detection Device

TITLE OF INVENTION

CYR, Douglas R, FARROW, Roger L. and ARNOLD Don W.

APPLICANT(S) FOR DO/EO/US

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information

1. This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. The US has been elected (Article 31).
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. is attached hereto (required only if not communicated by the International Bureau).
 - b. has been communicated by the International Bureau.
 - c. is not required, as the application was filed in the United States Receiving Office (RO/US).
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. is attached hereto.
 - b. has been previously submitted under 35 U.S.C. 154(d)(4).
7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. are attached hereto (required only if not communicated by the International Bureau).
 - b. have been communicated by the International Bureau.
 - c. have not been made; however, the time limit for making such amendments has NOT expired.
 - d. have not been made and will not be made.
8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). (Copy of Declaration filed April 2, 2004)
10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11 to 20 below concern document(s) or information included:

11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. A preliminary amendment.
14. An Application Data Sheet under 37 CFR 1.76.
15. A substitute specification.
16. A power of attorney and/or change of address letter
17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.
18. A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

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|--|---|--|--|--------------|--------------|--|----------|--|---|-------|--|--|--|--|----------------------------|--|--|--|--|--|---------------------------------|--|--|--|--|--|-------|---------------|--|------|---------|--------|--|------------|--|--|--|----|--------|--------------|--------------|------|--------------|----------|---|-----------|--------------------|------------|---|------------|--|--|--|------------|--------------------------------------|--|--|--|--|--|--|--|-------------------------|--|--|--|--|--|--|--|-----------------------------------|--|--|--|--|--|--|--|------------------------------------|--|--|--|--|--|--|-----------------------|--|--|--|----------------------|
| U.S. APPLICATION NO. (if known) 10/552201 | INTERNATIONAL APPLICATION NO. PCT/US 2004/010234 | ATTORNEY DOCKET NUMBER 14135-1 PCT (US) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20. <input checked="" type="checkbox"/> Other items or information: Return postcard | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>The following fees have been submitted</td> <td>CALCULATIONS</td> <td>PTO USE ONLY</td> </tr> <tr> <td>21. <input checked="" type="checkbox"/> a) Basic national fee.....</td> <td>\$300.00</td> <td></td> </tr> <tr> <td>22. <input checked="" type="checkbox"/> b) Examination fee.....</td> <td>\$200</td> <td></td> </tr> <tr> <td colspan="3">If the written opinion prepared by the ISA/US or the international preliminary examination report preliminary examination report prepared by IP8/US indicates all claims satisfy provision of PCT prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0</td> </tr> <tr> <td colspan="3">All other situations \$200</td> </tr> <tr> <td colspan="3"> 23. <input type="checkbox"/> Search Fee If the written opinion prepared by the ISA/US or the international preliminary examination report prepared by IP8/US indicates all claims satisfy provision of PCT article 33 (1)-(4) \$0 Search fee has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously, indicated to the US by the IP \$400 Previously communicated to the US by the IB \$500 All other situations </td> </tr> <tr> <td colspan="3" style="text-align: center;">TOTAL OF 21, 22 AND 23 =</td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each 50 additional sheets or fraction thereof </td> </tr> <tr> <td>Total</td> <td>Extra sheetss</td> <td>Number of each additional 50 or fraction thereof (round to a whole number)</td> <td>RATE</td> </tr> <tr> <td>- 100 =</td> <td>/ 50 =</td> <td></td> <td>x \$250.00</td> </tr> <tr> <td colspan="3">Surcharge of \$130.00 for furnishing any of the search fee, examination fee or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(e)).</td> <td>\$</td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> </tr> <tr> <td>Total claims</td> <td>20- 20 =</td> <td>0</td> <td>x \$50.00</td> </tr> <tr> <td>Independent claims</td> <td>Three- 3 =</td> <td>0</td> <td>x \$200.00</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM (if applicable)</td> <td>+ \$360.00</td> </tr> <tr> <td colspan="4" style="text-align: center;">TOTAL OF ABOVE CALCULATIONS =</td> </tr> <tr> <td colspan="4"> <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2 </td> </tr> <tr> <td colspan="4" style="text-align: right;">SUBTOTAL = \$300</td> </tr> <tr> <td colspan="4">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest priority date</td> </tr> <tr> <td colspan="4" style="text-align: right;">TOTAL NATIONAL FEE = \$300</td> </tr> <tr> <td colspan="4">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</td> </tr> <tr> <td colspan="4" style="text-align: right;">TOTAL FEES ENCLOSED = \$300</td> </tr> <tr> <td colspan="3"></td> <td>Amount to be refunded</td> </tr> <tr> <td colspan="3"></td> <td>Amount to be charged</td> </tr> </table> | | | The following fees have been submitted | CALCULATIONS | PTO USE ONLY | 21. <input checked="" type="checkbox"/> a) Basic national fee..... | \$300.00 | | 22. <input checked="" type="checkbox"/> b) Examination fee..... | \$200 | | If the written opinion prepared by the ISA/US or the international preliminary examination report preliminary examination report prepared by IP8/US indicates all claims satisfy provision of PCT prepared by the IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) \$0 | | | All other situations \$200 | | | 23. <input type="checkbox"/> Search Fee If the written opinion prepared by the ISA/US or the international preliminary examination report prepared by IP8/US indicates all claims satisfy provision of PCT article 33 (1)-(4) \$0 Search fee has been paid on the international application to the USPTO as an International Searching Authority \$100 International Search Report prepared by an ISA other than the US and provided to the Office or previously, indicated to the US by the IP \$400 Previously communicated to the US by the IB \$500 All other situations | | | TOTAL OF 21, 22 AND 23 = | | | <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each 50 additional sheets or fraction thereof | | | Total | Extra sheetss | Number of each additional 50 or fraction thereof (round to a whole number) | RATE | - 100 = | / 50 = | | x \$250.00 | Surcharge of \$130.00 for furnishing any of the search fee, examination fee or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(e)). | | | \$ | CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | Total claims | 20- 20 = | 0 | x \$50.00 | Independent claims | Three- 3 = | 0 | x \$200.00 | MULTIPLE DEPENDENT CLAIM (if applicable) | | | + \$360.00 | TOTAL OF ABOVE CALCULATIONS = | | | | <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. 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| All other situations \$200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| TOTAL OF 21, 22 AND 23 = | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Total | Extra sheetss | Number of each additional 50 or fraction thereof (round to a whole number) | RATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| - 100 = | / 50 = | | x \$250.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| CLAIMS | NUMBER FILED | NUMBER EXTRA | RATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total claims | 20- 20 = | 0 | x \$50.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Independent claims | Three- 3 = | 0 | x \$200.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MULTIPLE DEPENDENT CLAIM (if applicable) | | | + \$360.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL OF ABOVE CALCULATIONS = | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| SUBTOTAL = \$300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | Amount to be refunded | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Amount to be charged | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

10/5/2005
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- a. A check in the amount \$ to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. 19-2090 (Sheldon & Mak) in the amount of \$300 to cover the above fees.
A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 19-2090. (Sheldon & Mak). A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. WARNING

NOTE: Where an appropriate time limit on the 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO

Jeffrey G. Sheldon Esq.

Sheldon & Mak,

225 South Lake Ave.,

Pasadena, CA 91101-3021

Tel No. 626-796-4000 Fax No. 626-795-6321

Customer No. 23676

SIGNATURE

NAME T.H.P. RICHARDSON

REGISTRATION No. 28,805

DATE October 6, 2005


T.H.P. Richardson